

AVIATION

The Oldest American Aeronautical Magazine

APRIL 12, 1926

Issued Weekly

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Air Mail Hangars at Hadley Field By Night.

(c) William E. Arthur

VOLUME
XX

SPECIAL FEATURES

NUMBER
15

FLYING FIELD EQUIPMENT FOR AIR TRANSPORT
ANNUAL REPORT OF CURTISS FLYING SERVICE, INC.
THE LIGHTING OF THE LONDON-CONTINENTAL AIRWAY

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APRIL 12, 1926

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No. 15

Balloon Racing

THIR PART year has seen a considerable revival in the fine sport of ballooning. Three new trophies were put into competition during 1935. These were the Litchfield Trophy, the Major Thomas Baldwin Trophy, and the Detroit News Trophy. The last two trophies were awarded for big balloons of 30,000 cu. ft. and under, the middle being so restrictive that this year the National Balloon Race itself (in which the Litchfield Trophy is also competed for) has been changed to call for a 30,000 cu. ft. was instead of the big 50,000 cu. ft. balloons which has hitherto been the rule in the race. The National Balloon Race has been moving down to the few older pilots who happened to have balloons of the required 30,000 cu. ft. size. This is too big for ordinary training purposes, and hence now talent was correspondingly discouraged from entering. The change in policy this year has apparently already borne fruit, for the entry list shows the names of several pilots who have never yet competed in the National Race. It is to be hoped that the succeeding years will show a still further increase in popularity in a sport which is relatively safe and comparatively low in cost and which, at the same time, is a means of accumulating most valuable experience in those fundamental sciences of meteorology and navigation which are the foundation of all aircraft operation.

If the coming race from Little Rock is a success, it will be a considerable argument for changing, in similar fashion, the required size for balloons in the International Gordon-Bennett Balloon Race.

Commercial Speeds of 300 M.P.H.

ONE OF the most fascinating fields for aeronautical production is the possible development of high flying planes for commercial use. For long distance flights, greater speed, greater comfort, and fewer stops would be desired, but the problems to be met are many.

Flying at 50,000 ft., in air tight cells with normal ground atmosphere pressure inside would have to withstand a landing force of 13,000 lb. per sq. in. By making a cylindrical cabin of a diameter of 8 ft., with semi-spherical ends, so that all parts were in tension, a safety factor of four could be obtained by using steel structures of a thickness of .003 in.

As such thicknesses are excessive positive in flying best construction, it is fairly obvious that weight would not be prohibitive.

By using a wind driven air pump, normal pressure could be maintained in the cabin and fresh air supplied. Temperatures at 50,000 ft., vary from about 130 deg. Fahrenheit, at the engine to -70 deg. Fahrenheit, in the temperate zone. The compressed air from the supercharger would be heated out, with the exhaust heat and sometimes preheating, the cabin could easily be kept warm.

At 50,000 ft., the air has about 1/3 the ground density, but the plane would have to travel at 235 times ground speed to maintain itself in the air. Although the lift/drag ratio would be the same, the plane would have to travel forward 238 times as far in a given time to stay in the air and, thus, would require 238 times the power necessary to keep it in the air at ground level. However, to attain the same high speed at ground level would require about fifteen times the power. The power would be used, of course, in very low, a fact which is probably the most serious problem from the commercial standpoint, is it is both both the length of the flight and the useful load.

The most difficult problem to be tackled is getting and delivering the power at these altitudes. Fortunately for the advancement of aviation, McCook Field has been doing an enormous amount of work along these lines. The supercharger has been developed to a point where it comes to be fantastic to claim that full power will obviously be developed at 50,000 ft. McCook Field engineers have built propellers of great diameter and area, they have built variable pitch propellers and, perhaps equally important, they have built and applied to airplanes a change gear mechanism so that a geared propeller can become a direct drive propeller.

Little is known about wind conditions at very great heights, but, from existing knowledge, it can safely be said that, between 50,000 ft. and 60,000 ft., favorable air current winds can be found at the same can be varied from weak to northern winds. In the region of the trade winds, for example, five different general layers of wind direction have been noted. These outside winds are much more regular than the surface winds, and their velocity is higher though not as high as popularity supposed.

There are many problems, both minor and major, which must be solved individually before flying at great altitudes is really practical, but there is no reason to believe that these will not be solved within the next generation. Supper in New York and breakfast in Paris is our motto.

Another Arctic Party Leaves

IN THE afternoon of April 8, ahead of the moment of Alaskan dawn to prove the Byrd Expedition left Brooklyn Navy Yard aboard the steamship Chaumont, on the way to Kings Bay, Nythberg, which will be the base from which it intended to make the Arctic extension will be undertaken. Sledges had three been so completely equipped an expedition set out upon its mission. With Withers already in the North and the Amundsen and Byrd expeditions on the way there, and the All American University Alaskan expedition planning to leave in June, there would seem to be every likelihood of some very real and valuable information deriving from such a concentrated attack upon the "unconquered" of the Arctic regions.

Money Flare, consisting of a metal container in which an acetone-respirator saturated with acetone is ignited when required, burned for some five and a half hours on one filling. This latter system is used at Langley, where night landings are infrequent, and is satisfactory under certain limits.

The floodlight system has been in use at Cranfield for some years, in the entire substation at all practical points along that airfield. The plant employed consists of one half of a 500 watt, 240 volt, composed of twenty one discharge elements, and burning at 240 volt center, a carbon arc of the high capacity type, taking 150 amperes at 100% light. The lamp is inclined light through about 120 deg. in azimuth but has a very narrow vertical dispersion in order that as much light as possible may be kept at or below the horizontal plane. The whole of the system and illuminating area, i. e., from front windshield, fluorescent control meter tank, etc. etc. is suitably housed in a metal structure and the whole mounted on a four-wheeled truck at a type adapted for towing about an airfield.

Electric Supply

The necessary electric current is provided from two 10 k.v. power lines, plants, placed one on each of the North-South East and West-ends of the field, and connected to the floodlight by three meters cable. These cables are fitted at the lower track for the taking of the light lines in diameter, the cables being used by modifications in the landing area, which moderately is for front track, and has one very narrow ridge running North and South that was originally a Roman road and which, in modern days, has crumbled up a few inches average.

The illumination given by the floodlight enables night landings to be made in dry work from the pilot's own point, and appears to give a certain feeling of confidence and safety to the average passenger, who sees the whole airfield clearly and laid bare, and is impressed by the simplicity and ease of night operations.

The principal objection to the widespread use of floodlights of this type lies, of course, in the power supply. It has been found necessary to employ three skilled operators for the Cranfield light and, although these men are used on other work

as well, there still remains a fairly high wage charge against the use of the floodlight, gasolene, oil, carbon and spare parts also represent a considerable cost item in the running of the equipment.

With regard to night landings, at Cranfield and Cranfield, the necessary ground illumination is provided from the aircraft itself in the form of Hall lights in the Three-Drop, Type, which is brought about by the lower planes at the end. There are two three-in. in a road, tip, fitted in line, but not at the rear end of each plane leaving a burning period



The extensive illuminated road device induces

of the road in line. This is done for avoiding the ground lighting as of finding a field when circumstances require and permit, while the road and, leaving the light, are used for the road lighting.

The light given in these three is adequate in all cases, and, although there has been much discussion regarding the risk attributed by them, the system has never yet been able to find a definite case where it could have been safely assumed that the road was used by a light flare.

There remains to be discussed the lighting equipment itself in commercial service in England, and the various systems of electricity lights in use on high W/T lights, on air craft, and on air stations, but space does not permit of this being done in the present issue.

The useful land of the plane is determined considerably, and the search has only recently been made under the latest scheme light to which a plane is exposed, the attention between two standard methods on search and depth in more good. It takes quite a time for the most of search to day. Also when the search (early field) it is extremely difficult or impossible to remove it from the field and leave the dark in proper condition for re-use.

The new glossy pigmented dopes of the Perry-Austin Mfg. Co. taken the place of the ordinary pigmented dopes, the dopes which being in general, four coats clear dope and two coats of glossy pigmented dopes of any desired color, entirely doing away with the extra coat of varnish.

This gives a glossy finish, which is readily cleaned of oil, dirt and grease, and saves the weight of an additional coat of varnish, and the labor and expense incident to its application and in much more durable. This new glossy pigmented dopes is also satisfactory for application to wood and metal over primer or previous primer coats, making possible a one color finish for the complete airplane.

More on Dopes

IMPROVING THE APPLICATION. By C. P. Young and C. W. Perry. The Perry-Austin Mfg. Co. 111. Published by The Air Service, Dept. of Commerce, 1935. 16 illustrations.

After a general discussion of the field dope use, this report considers the general characteristics of clear and pigmented dopes. Directions are given for the cleaning, drying, and for their application both with a brush and with the DeVilbiss gun-type system. Precautions that should be taken in painting a fabric that has been treated with a pigmented protective coating are also indicated.

Flying Field Equipment For Air Transport

By ARCHERBOLD BLACK

American Engineer, Wm. E. Arthur & Co. and Consulting Air Transport Engineer

IN CONSIDERING the technical requirements of air transport flying fields and their equipment it is impossible to lay down specifications which apply with reasonable accuracy to any project of moderate size. However, when the actual nature and type of equipment, size of buildings and other such matters are taken up, it becomes necessary to make out the complete investment and operations analysis for the specific project under consideration. No generalization can safely be made as to the type, size and number of buildings, for example, as these are entirely dependent upon the number and kind of airplanes to be housed, the type and amount of equipment which is to be stored at the field, the class of traffic and many other points. Each of these items must be settled by developing an operations analysis and working out the actual requirements, which may vary with every field in the same class.

Elements Affecting Equipment

The construction and equipment requirements of air transport flying fields are affected by many elements, among which the following might be listed as the more important. The order in which these are given, if should be noted, is not intended to suggest their relative importance as this depends greatly upon the characteristics of the project.

1. Number of airplanes arriving and leaving daily.
2. Amount of equipment to be stored.
3. Types of aircraft to be stored.
4. Amount of repair and maintenance work to be done at field.
5. Class of traffic passenger and freight.
6. Class of traffic freight and mail.
7. Type of equipment to be used with various airplanes in flight.
8. Location available for storage of equipment.
9. Location available for storage of equipment.
10. Location available for storage of equipment.
11. Location available for storage of equipment.
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18. Location available for storage of equipment.
19. Location available for storage of equipment.
20. Location available for storage of equipment.

Type of Hangar Buildings

The buildings, which must be provided at air transport flying fields, and which include hangars and all other necessary buildings, should be of such a type and of such a size as to be suitable for the use of the airplanes to be housed at the field.

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with fields that they are often to be used in permanent situations as freely as railroads, power companies, or other public utilities. At the same time great caution must be exercised against over-investing in the effort to construct too much expensive equipment early years later to be severely felt when economy. The slightly lower cost of the higher possible buildings makes them seem very inviting at first. However, it is both surprising and expensive to find, at some later date, that the roof frames are too light to carry the



The Traffic Movement Stand at the London Airport, England, shows which the position of airplanes along the main axis is marked. The position is marked by rails.

weight of an engine while it is being lifted out of an airplane with chain hoists. This is only one of the many little points which have a study habit of not being discovered until a mistake has been made on the line because of changing an engine



Cleveland Air Mail Field lit by night. The glow of the E.D.T. floodlight can be seen across the field though the light itself is not visible in the picture.

The matter of space, height and floor area depend upon the exact requirements of the project but it is well to note that the hangars should be designed for the exact type of craft which they are to house, keeping at the same time an eye on possible future developments.

In addition to the hangars, which are always required, it will usually be necessary to provide shop space in which airplanes can be repaired and engines overhauled. In some cases the larger space may be used for this work, while, in others, it is desirable to provide other buildings. Frequently it becomes advisable also to provide garage space and, if freight or package traffic is to be handled in any volume, it may be desirable to provide space in which the shipments can be loaded, stored and sorted. Some provision must be made for a field office, even if this consists merely of a conference in the hangar or a table against a wall. If passenger traffic is to be handled, it is desirable to provide a small waiting room and comfort station.

Interior Equipment

The question of type of flooring for each building depends upon local conditions as well as the use to which the building is to be put and the particular characteristics of the field in the project. Generally, wood floors are desirable for shops, offices and waiting rooms and concrete floors for garages and hangars. However, there are many exceptions and some considerable floors are desirable for hangars which are not to be used very extensively. Lighting should be provided in all buildings and, excepting in some climates, the spaces used for workshops, offices, etc., should be heated. Whether or not the garages, hangars and other buildings are heated will depend partly upon the extent to which work is to be done in them. Toilet facilities must always be provided even if it is necessary to make them very primitive.

Gasoline Storage and Equipment

The equipment required, in addition to buildings, will include such things as airplanes and engine shop and garage tools, airplane servicing equipment and field maintenance equipment. These include so many small items that it is impossible to go into the lists of them in detail in this short note. In all cases gasoline and oil storage must be taken into consideration. Whether gasoline and oil are stored in an outdoor or in underground tanks will depend largely upon the quantities to be stored on hand. The underground tank system is (particularly) desirable for gasoline storage and a small stock of oil will suffice for the storing of oil, gasoline, airplane wing dope, paint and other indispensable materials.

The extent to which heating is required outside of the buildings will depend upon the amount of work flying which is to be done. If there is to be very little night flying, the expenditures for this class of equipment can be cut down and some materials provided instead of the more expensive items which would be necessary in regular use.

The whole problem of air transport flying field equipment has many ramifications, such of which calls for certain highly specialized knowledge. Thus, the various viewpoints must



The Weather Board at the Chrysler Airport

such be balanced against each other for every use. Factors in various amount of construction. It is, therefore, desirable to consult the specialist in flying field work both locally and freely. An experienced aviator can help him to develop plans which point the way to most important savings, reduce this policy, an aviator's interest in an expense.



Denon Goods Store, Morgan River, Mo.

The Bristol Cherub Air-Cooled Engine

A New Model of the Well-Known British Lightplane Engine Successfully Passes Stringent Tests.

AS A RESULT of the success of the original Cherub engine in the 1934 and 1935 Lightplane Competition, the Bristol Aeroplane Co. of England decided to develop this engine further, with the idea of putting it on a basis equal to the best modern large aircraft engines as regards reliability and performance. As a result of extensive work, the Series III engine has been developed.

In the re-designing of the Cherub Series III engine, there has been provided a more robust crankcase, a full bearing big end bearing, full pressure system, dry sump and double gear pump. The capacity has been increased to 5,225 cc. and a new type of carburetor and double carburetor have been fitted.

Passes Air Ministry Tests

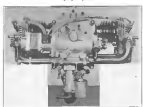
The engine has recently been submitted successfully to the latest British Air Ministry 100 h. p. type tests. It completed this test in two one-day periods of 15 h. each, without any loss, stoppage, adjustments or replacements. The first test being the engine held 35.4 h.p. at 1,000 r.p.m. The maximum fuel consumption throughout the test was 360 gals. per h. p. per hr. and the average oil consumption 305 gals. per h. p. per hr. At the conclusion of the test, the engine was stripped and found to be in excellent condition.

General Details

The "Bristol" Cherub engine is of the two-cylinder overhead type and has a total net output of 100 h.p. at 1,200 r.p.m. The crankshaft is a cast-iron alloy and is supported by four bearings, the crankcase is an aluminum casting, cast vertically on the engine center line and provided with supports front and rear covers. There are three main journal bearings. The front end of the deep groove type, located in the rear of the crankcase, and the rear of the propeller shaft in the crankcase is the rear. The other two are of the double row

type, driven by the crankshaft, intermediate and magneto and of pump, respectively.

Connecting rods are alloy steel forgings with hardened flanges, pressed into the big ends, the proportion of which are such that the rods may be threaded over the shaft. When in position, the top's bronze bearing bushes are inserted and the two halves secured by a light brass nut, each secured which are locked by light pins.



The Bristol Cherub engine seen from the rear

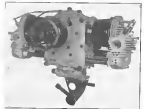
The pistons are of aluminum alloy, fitted with three rings, the lower one of which serves as a scraper and returns surplus oil from the cylinder walls through drain holes in the piston skirt. The hollow piston pins float, both in the piston bushes and in the connecting rod small ends and are lubricated indirectly by means of passages pressed into their open ends.

Overcoming Expansion Differences

The cylinders have steel heads, but the inlet and exhaust passages are formed in the aluminum alloy heads, which also carry the overhead inlet and valve seats, valve guides, valves and springs. A deep groove for the head is provided on the barrel with a flange to which the head is bolted by a copper ring spotted and very carefully fitted in an angular groove cut in the head and barrel flange. As the rates of expansion of aluminum and steel are different, great difficulty is usually encountered in the manufacture of a ready-to-go joint with this type of head. In the Cherub head, this difficulty has been entirely overcome by inserting packing pieces of a special alloy, having an unusually low rate of expansion, between the cylinder heads and the barrel of the connecting bolts. This arrangement, combined with the copper ring joint, has proved so satisfactory that the ends of the bolts are riveted over their ends, the head and barrel being regarded as one unit, which need never be disturbed. The cylinders are secured to the crankcase by a rigid and flange joint, a flange joint, serving to make the joint oil tight.

Inlet and exhaust valves are of cast-iron alloy steel and are interchangeable, and where necessary springs are on the same valve. The valve operating gear is somewhat unusual and has distinctive features of maintenance importance.

The crankshaft, which, with its four ends is enclosed from the side, runs upon main bearings before the crankshaft is driven by a yoke, gear pairs of single flange. The ends are of the crankshaft are connected to the valves are operated by rocker shafts which run parallel to the cylinder



The pistons and end of the Bristol Cherub engine

will always type, and selected adjustment in the crank flange, one in front and the other in behind, and are locked in the front and rear half crankcase, respectively. The top end of the shaft is supported in the rear corner by a plain white metal bearing which provides an oil seal, allowing oil to be supplied through the flange and oil seal and oil seal always to the big end of the bearings. On the shaft between the two rear bearings, a spur wheel and two spur gear wheels

American Commercial Flying

More Mileage Statistics of Commercial Pilots Operating Throughout the Country.

IN LAST week's issue of AVIATION there were published two pages of statistics of the mileage of American commercial pilots operating throughout the country. This mileage total, up to that time, was 4,685,655 miles and below will be found the additional reports which have been received to date. These total 1,059,936 miles, bringing the aggregate total up to 5,745,591 miles.

Owing to an error which prevented sufficient space being provided for the publication of the entire list last week, the lists of Texas, Utah, Virginia, Washington, West Virginia, Wisconsin and Wyoming were automatically omitted and are, therefore, printed below individually.

Statistics

Continued from Original List

TEXAS		
John W. Bennett	30,000	
John W. Bennett	30,000	
John C. Bennett	3,700	
James Arthur Thompson	3,000	
George Blair Co.	3,000	
Don W. Smith	4,000	
Gregory P. Co.	15,000	
W. C. Quirk	25,000	
UTAH		
Earl H. Warner	5,000	
Alexander H. Thompson	30,000	35,000
VIRGINIA		
A. A. Boyd	11,000	
Tabernaes Hanks	10,000	
W. S. Smith	10,000	
W. S. Smith	10,000	
T. S. Smith	8,000	18,000
WASHINGTON		
W. S. Smith	80,000	
W. S. Smith	80,000	
W. S. Smith	80,000	
WEST VIRGINIA		
W. S. Smith	10,000	
W. S. Smith	10,000	
W. S. Smith	10,000	
WISCONSIN		
James H. Smith	10,000	
W. S. Smith	10,000	
W. S. Smith	10,000	
WYOMING		
W. S. Smith	10,000	
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W. S. Smith	10,000	

New Reports

ALABAMA		
James Turner	10,000	10,000
ARIZONA		
John W. Smith	15,000	15,000
CALIFORNIA		
John W. Smith	8,000	
Paul E. Smith	8,000	
W. D. Williams	10,000	
W. D. Williams	10,000	
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W. S. Smith	10,000	
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Service Use of Oxygen

PRACTICAL FIELD SERVICE USE OF OXYGEN. By P. S. Rogers. 12 pp. 12 illustrations. Published by G. P. Putnam's Sons, 25 Broadway, New York. Price, 15 cents.

In this booklet is given a detailed description of the oxygen apparatus provided to supply oxygen to pilots at high altitudes. The oxygen is stored and carried in small steel cylinders at a pressure of about 2000 lb. per sq. in. Perforations for drying and cleaning the oxygen before it is introduced into the cylinders and regulations for unloading the use are other parts of the equipment described. Instructions for handling the apparatus are included.

An Air Mapping Contract

The International Aerial Engineering Co., Inc., 25 Broadway, New York City, has been awarded a contract by the South American Oil Co. Company, 31 State Street, New York City, for the aerial photographic mapping of approximately 300 square miles of previously unmapped petroleum lands. The property is situated in the Magdalena Valley, Department of Santander, Colombia, South America.

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AIRPORTS AND AIRWAYS

Philadelphia News

By C. T. Longacre

Howard P. Warble has established himself as Philadelphia for the summer and with his good wheeled energy is on making up on sleep hours that he lost one of the seasons at the National Air Show in September. In a few days Howard will have his headquarters based up and working and will live right at the airport accommodations being loan for the glaucous Warble Philadelphia will be the important "center of activity." It is thought by some that this work being on the ground is on here now, some say they probably for another five years. There are others, however, who believe this will not be the case as the timing of the ships during the Air Races is expected to continue at the Municipal Field, Philadelphia, and elsewhere in the city. The old town will never again be able to settle down in quiet slumber.

It is planned to have the grand five exhibitions by the Army and Navy and in addition will have one by the Army alone. It is planned to have these shows and the people are promised a change in reality on the developments in Commercial Aviation.

Philadelphia appears to be back, among its old and larger quarters on a beautiful field and the Great Western Court on the splendid Drexel-Dodge Pike.

Poor Valley is full of activity. When, Paines and back ships, have come out of being and several new shuttles have started operations with the Howard.

At the Municipal Field grounds and working is being noted in completion. Work has begun on the machine of the bureau for the 1936 Observation Squadron and there will be much by the airport at about the time the field is ready to go.

Under the direction of J. R. Keston and Maj. J. A. Selby there is a group of a hundred or more men who are busy engaged in making a study of the V. M. C. with the 1936-37 flight in mind. Much help has been received from the V. M. C. group. A model will be in the field of Poor Valley on April 16.

On Thursday March 16 Philadelphia had its first day of being the center of aviation. On that date the Engineers Club staged its Air Transportation Meeting. The field was closed up almost all parts of the country and it seemed that all felt will report for duty here. In the afternoon the meeting was addressed by C. M. Key, Paul Henderson, William B. Hunt and Captain Horle of Lakeland. In the evening a dinner, attended by about ten hundred persons was followed by the day. The Service Director of the British Air Ministry, Charles G. Shaw of the Post Office Department, William L. Macmillan, J. R. Keston and N. Taylor and

Howard Warble. It is expected that the various addresses will soon be available for all interested. Eventually at Lakeland will show the various shuttles and the Howard. The July work paper and will have left the Howard a place and show him.

There are conference for aviation participation in a New York at the opening of the Navy Yard field early in July. It is expected that Howard Warble's Air Base Committee

will at December, 1935, by A. B. McMillan, who, for the past three years, has been an active partner in the Howard. McMillan's company at Lakeland, West Va. Captain McMillan's work in the Howard the latter part of October and, after spending several weeks in looking the Navy over, decided that the present as well as the future of Florida looked very bright for commercial aviation. Captain McMillan was interested in the flying the navy year and the



A display at West at Port Valley, N. J., home of the Longacre Exhibition Co.

will get a thorough try-out of the new. Civilian proposals are in the hands of an Army Civil Committee composed of Gen. H. H. Hilt of the Naval Aircraft Factory, Stuart P. Warble, and C. T. Longacre.

Aviation Activities in Florida

That Florida is now commercially is evidenced by the success enjoyed by the A. B. McMillan company with headquarters at Tampa, which was approved during the winter

while the is particularly level, its highest point being 200 ft above sea level which permits crossing the State with a very low wing. The population is steadily increasing and Florida is now a state, as a whole, is showing a great deal of interest in the establishment of permanent landing fields.

After deciding to locate in the north, he immediately began to build up an organization. At the present time the company has a flying school and supply base at Tampa and one at Daytona Beach and by April 3, will have opened up operations at Atlanta, Ga., which will be made the major

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and serves headquarters for the entire company.

At Tampa, the company keeps four planes available for flying at all times. From Jan. 1 to March 16, these machines flew over 110,000 miles, 750 passengers were carried on short night seeing flights, 5 students received instruction in flying, 24 photographic flights were made, during which approximately 11,000 views were snapped and obtained under numerous instances, hotels, developments and news events.



Planes of the McMillan Co. at Tampa, Fla., with some Florida Airways planes in the background.

Local country flights with passengers or express were made to the following cities: Palm Beach, 3 trips; Miami, 2 trips; Ft. Myers, 3 trips; Lakeland, 3 trips; Gainesville, 3 trips; Ocala, 2 trips; Daytona Beach, 5 trips; Jacksonville, 3 trips; St. Augustine, 1 trip; Lake City, 1 trip; Tallahassee, 1 trip; Wilkeson, 2 trips; Webster, 1 trip; Helena City, 2 trips; Seaboard Park, 2 trips; Santa, 1 trip; Atlanta, 1 trip.

C. D. Colquhoun is in charge of the field at Tampa. J. W. (Bud) McMillan, operations in mechanical and photographic work and E. B. Bangs is in charge of cross country passenger and express service. McMillan and Bangs were both army flying instructors during the war and have had extensive experience in both military and commercial flying. While Colquhoun is one of McMillan's students who has made good and has been raised several times in his present position.

The A. B. McMillan Co. has been appointed exclusive distributor for Stinson airplanes and has already placed six New Yorkers in Florida.

Three months ago there was less than twenty planes permanently located in the State. Now there are at Miami, 20; Tampa, 15; Sebring, 7; Jacksonville, 7; Daytona Beach, 6; Orlando, 4; Hialeah City, 4; Ft. Myers, 3; St. Petersburg, 4; Brooksville, 2, with about 50 more scattered throughout the State, including the barefooting boys from the North. The show figures make flying better as well as lead planes.

Denver News

By J. A. McMillan

Quite some excitement on Saturday afternoon, March 30. Mr. Alexander received a telegram at 1:20 p.m. advising that his mother was dying in Keweenaw, Iowa. The train had left at 3:30 which and the next would not be until 11 p.m.

Our van proceeded, D. H. Alexander, with chief pilot Vander topped into an Englewood at 3:45 and overtook the train at Fort Morgan, 50 miles away, then seeing 12 hours. We were sorry to say that his mother passed away before he arrived.

The nearest officers and express interested in aviation are working on plans for a Monoplane Field.

We were very much pleased to receive a visit from Tom Rusklin who has just visited almost all of the Alaskan Companies in the country, and we learned a great deal from his observations.

leary. Three weeks was the shortest time his Florida partners could possess delivery, as Walter Chambers, its advertising director and A. B. McMillan shared in a New Yorker at Tampa at noon on a Saturday. Five hours and thirty minutes later they landed at Alameda Co. The same was furnished the position there that night and the following Tuesday morning the greatest amount was delivered at the Alameda field and, 40 miles, was landed at Tampa, 17 days ahead of the time it could have been sent by waiting for lead planes.

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Denver News

By J. A. McMillan

Quite some excitement on Saturday afternoon, March 30. Mr. Alexander received a telegram at 1:20 p.m. advising that his mother was dying in Keweenaw, Iowa. The train had left at 3:30 which and the next would not be until 11 p.m.

Our van proceeded, D. H. Alexander, with chief pilot Vander topped into an Englewood at 3:45 and overtook the train at Fort Morgan, 50 miles away, then seeing 12 hours. We were sorry to say that his mother passed away before he arrived.

The nearest officers and express interested in aviation are working on plans for a Monoplane Field.

We were very much pleased to receive a visit from Tom Rusklin who has just visited almost all of the Alaskan Companies in the country, and we learned a great deal from his observations.

J. A. McMillan will leave in a few days for Kansas City with a new Republic demonstrator.

Bloom Field, under the management of Earle Parker, is getting all set for spring business, with new signs, new equipment, etc.

Norman J. Lee of Colorado Springs has been appointed dealer for southern Colorado for the Alexander-Eberhardt. Five students are taking instruction daily at the Alexander Airport, with a waiting list of ten.

Bethow, Minn.

A. V. Swenson recently purchased an OX5 Standard from C. L. Horton at Poughkeepsie, Wis. and flew the machine to his home town, a distance of 250 miles. The trip was made in 3 hrs. 10 min. non stop. The 1934 Stinson was equipped in commercial flying at Fayetteville, Minn., for the Alaska Aerial Transportation Co. This meant many trips at high altitude with a Hens Standard.

He is now building a hangar, and has about 30 acres of field in work form. Fields are scarce at any time. Gasoline and oil within three miles of field.

Peoria News

It has finally been definitely decided that the Chicago-St. Louis, Air Mail Fender line will stop at Peoria. The Mail will land at Varnum Airport, which through co-operation of the Association of Commercial pilots serves as a municipal airport. A few Stinson biplanes are being applied to the field, by pulling out a short section of hedge, and something out a few of the rough spots and making down the surface.

Varnum Airport is located about 5 miles north of the Court House (about a mile and a quarter north and a corner of a mile west of the Post Office). It is the same field the Varnum Airport Co. have been using for the past six years, but has been improved from time to time so it is suitable for practically any type of plane to use.

The Varnum Airport Co. have a large class of students in their spring class, and we have gotten their passenger ships

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editor

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